

5.2.2 Ordered Component Reference Set

Purpose

An [733619002 |Ordered component type reference set \(foundation metadata concept\)](#) allows a collection of [components](#) to be defined with a specified order. This type of [reference set](#) is therefore useful for creating ordered lists and to specify groups where the components that belong to the same group share the same order.

Data structure

An [Ordered component reference set](#) is an [Integer Component reference set](#) is used to represent ordered lists and alternative hierarchies. Its structure is shown in the following table.

Table 5.2.2-4: Ordered component reference set - Data structure

| Field | Data type | Purpose | Mandatory | Part of Primary Key |
|-----------------------|-----------|--|-----------|--|
| id | UUID | A 128 bit unsigned Integer , uniquely identifying this reference set member . Different versions of a reference set member share the same id but have different effectiveTime . This allows a reference set member to be modified or made inactive (i.e. removed from the active set) at a specified time. | NO | YES (Full /Snapshot) |
| effectiveTime | Time | The inclusive date or time at which this version of the identified reference set member became the current version. Note: In distribution files the effectiveTime should follow the short ISO date format (YYYYMMDD) and should not include the hours, minutes, seconds or timezone indicator. The current version of this reference set member at time <i>T</i> is the version with the most recent effectiveTime prior to or equal to time <i>T</i> . | YES | YES (Full) Optional (Snapshot) |
| active | Boolean | The state of the identified reference set member as at the specified effectiveTime . If active = 1 (true) the reference set member is part of the current version of the set, if active = 0 (false) the reference set member is not part of the current version of the set. | YES | NO |
| moduleId | SCT ID | Identifies the SNOMED CT module that contains this reference set member as at the specified effectiveTime . The value must be a subtype of 900000000000443000 Module (core metadata concept) within the metadata hierarchy . | YES | NO |
| refsetId | SCT ID | Identifies the reference set to which this reference set member belongs. In this case, a subtype descendant of: 900000000000443000 Module (core metadata concept) | NO | NO |
| referencedComponentId | SCT ID | A reference to the SNOMED CT component to be included in the reference set . | NO | NO |
| order | Integer | Specifies the sort order of the list. The list is ordered by applying an ascending sort of the order value. The value of order =1 represents the highest priority. A value of '0' is not allowed. Duplicate values are permitted and the sort order between two members with the same order value is not defined. Note: The name "order" is a reserved word in some database environments. Please consider this when using this column. | YES | NO |

Metadata

The following metadata in the "Foundation metadata [concept](#)" [hierarchy](#) supports this [reference set](#):

Table 5.2.2-4: Ordered Component Reference Sets in the Metadata Hierarchy

| |
|---|
| <p>900000000000454005 Foundation metadata concept 900000000000455006 Reference set 733619002 Ordered component type reference set </p> |
|---|

Reference Set Descriptor and Example Data

i Notes on the tables used to show descriptors and examples

The reference set example tables on this page have been revised as follows to aid clarity and understanding:

- The first four columns which are present in all release files are not shown. The omitted columns ([id](#), [effectiveTime](#), [active](#), [moduleId](#)) are used in the same way in all referenced sets to support identification, versioning and packaging. They do not directly affect the specific features of a particular reference set or reference set type.
- Reference set columns that contain SNOMED CT identifiers are expanded to show details of the concept or description referenced by that identifier. In some cases, the term is shown in the same column using the expression syntax, in other cases an additional column with a name suffix '_term' has been added. In the standard reference set files only the identifier is present in the column and there is no added column for the term. When using reference sets, the term and other details of the component are looked up from the relevant component release files.

Descriptor Template

The tables below show the descriptor that defines the structure of the [733619002 |Ordered component type reference set|pattern](#) and an example of a descriptor for a specific [reference set](#) that follows this pattern.

Table 5.2.2-4: Refset Descriptor rows for an ordered reference set

| refsetId | referencedComponentId | attributeDescription | attributeType | attributeOrder |
|---|--|--|---|----------------|
| 900000000000456007 Reference set descriptor | 733619002 Ordered component type reference set | 449608002 Referenced component | 900000000000460005 Component type | 0 |
| 900000000000456007 Reference set descriptor | 733619002 Ordered component type reference set | 447255006 Priority order reference set attribute | 900000000000478000 Unsigned integer | 1 |

Note: The table above omits the initial four columns of data present in the release file. These follow the standards versioning pattern [id](#), [effectiveTime](#), [active](#), [active](#). Additionally, to aid understanding, the table above also shows the [term](#) from one of the [descriptions](#) associated with each of the identified [concept](#). The release file only contains the [identifier](#).

Ordered reference set example

Fingers sorted A-Z

| |
|---|
| 127053016 Thumb |
| 136021011 Fourth finger |
| 138873019 Second finger |
| 108884010 Third finger |
| 21356012 Fifth finger |

Fingers sorted logically using an ordered component reference set

| referencedComponentId | order |
|---|-------|
| 127053016 Thumb | 1 |
| 138873019 Second finger | 2 |
| 108884010 Third finger | 3 |
| 136021011 Fourth finger | 4 |
| 21356012 Fifth finger | 5 |

Table 5.2.2-4: Rational ordering of finger concepts using an ordered component reference set

| refsetId | referencedComponentId (Referenced component) | order (Attribute order) |
|----------|--|-------------------------|
|----------|--|-------------------------|

| | | |
|---|---|---|
| 733619002 Fingers ordered component reference set | 127053016 Thumb | 1 |
| 733619002 Fingers ordered component reference set | 138873019 Second finger | 2 |
| 733619002 Fingers ordered component reference set | 108884010 Third finger | 3 |
| 733619002 Fingers ordered component reference set | 136021011 Fourth finger | 4 |
| 733619002 Fingers ordered component reference set | 21356012 Fifth finger | 5 |